

#### Progress Report on Implementation in 2003 of the Near-Term Action Agenda for Salmon Habitat Conservation Green/Duwamish and Central Puget Sound Watershed (WRIA 9)

March 5, 2004

The Near-Term Action Agenda (NTAA) was completed in May 2002 by the WRIA 9 Steering Committee. It provides interim guidance for local governments, volunteer groups, and other partners in the protection and restoration of salmon habitat in the watershed. It is available on-line at http://dnr.metrokc.gov/Wrias/9/NTAA/index.htm.

The NTAA called for annual progress reports on implementation of its recommendations. The report is the second such annual progress report. The first progress report was completed in April 2003 and chronicled the work done in 2002. It is available on-line at: <a href="http://dnr.metrokc.gov/Wrias/9/progrep2002v4.doc">http://dnr.metrokc.gov/Wrias/9/progrep2002v4.doc</a>

In an effort to go beyond the call of the NTAA and accurately reflect the progress being made in the watershed, this report includes salmon habitat-related actions whether directly inspired by the NTAA or not.

The purpose of the progress report is to:

- Record progress toward a healthier watershed for fish and people.
- Be a resource for people looking for others who have done or are doing similar things. This should help in coordinating related actions and should encourage the spread of good ideas.
- Remind people that the NTAA can be both a useful guide to and justification for action.

#### Criteria and Caveats:

- Activities are listed if they occurred in the Green/Duwamish and Central Puget Sound Watershed (WRIA 9) or could benefit WRIA 9 salmonid populations.
- Entries quantify accomplishments where possible.
- Activities listed focus primarily on habitat (hatchery and harvest management are not addressed in the NTAA).
- Partners were encouraged to report on implementation steps including:

- planning,
- seeking funding,
- increasing staff time,
- construction/purchase, and
- any other activity that will result in changes benefiting salmon habitat.
- Each activity has been categorized under the NTAA recommended action most relevant to the activity.
- While this report focuses on actions carried out in 2003, it also includes actions completed prior to 2003 where needed to accurately reflect significant accomplishments. In addition, Appendix A of the NTAA also summarized the activities of local governments prior to 2002.
- A new column indicates how the NTAA influenced the action: no effect, confirmed wisdom of choice, source of idea, used to support funding request, or other. Where no information was provided by the implementer, this cell was left blank.
- The 2002 report asked respondents to indicate what priority they attached to the NTAA recommendations. Few did so and thus this question was dropped in the 2003 report.

#### Partners Who Provided Information on 2003 Activities:

- Local Governments: Cities of Algona, Auburn, Burien, Covington, Des Moines, Enumclaw, Federal Way, Kent, Maple Valley, Normandy Park, Renton, SeaTac, Seattle, Tacoma, Tukwila, King County
- Other Governments/Agencies: Army Corps of Engineers, Washington State Department of Fish and Wildlife, Washington State Department of Ecology, Washington State Department of Natural Resources, Washington State Parks, Port of Seattle, Green River Flood Control Zone District, Covington Water District, South King County Regional Water Association
- Non-profit/Volunteer Groups: Mid-Sound Regional Fisheries Enhancement Group, People for Puget Sound, Puget Soundkeeper Alliance,
  Trout Unlimited, Environmental Coalition of South Seattle, Duwamish River Cleanup Coalition, Cascades Conservation Partnership,
  Cascade Land Conservancy, Middle Green River Coalition, Friends of Soos Creek Park, Washington Trout, SHADOW, South King
  County Chapter of Sierra Club, Normandy Park Community Club, Friends of Des Moines Creek, Fauntleroy Watershed Council,
  Vashon-Maury Island Land Trust, Vashon-Maury Island Audubon Society

Information, questions, and comments should be directed to Dennis Clark, Public Outreach Coordinator, (206) 296-1909, dennis.clark@metrokc.gov.

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	Wide Actions (WW)	T	T	T
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	City completed a detailed wetland/stream inventory in 2002.	Auburn	No effect
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	In 2003, undertook a spawning survey citywide.	Kent	Confirmation
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	Parks completed a habitat survey of shoreline parks and made recommendations for specific fish-friendly projects.  Seattle sponsored research by the University of Washington related to fish utilization of the nearshore.	Seattle	No effect

-

<sup>\*</sup> Role of NTAA refers to whether and how the Near-Term Action Agenda affected the implementer's action. Was there any effect at all? If so, did the NTAA provide the original idea for the action, did it serve as a confirmation of your own ideas, or was it used to support requests for funding?

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	A fish and wildlife habitat plan linking potential port development projects with large scale intertidal habitat restoration areas is being prepared. The present inventory of potential restoration areas includes seven sites, with a total area of approximately 15 acres. Addition planning will occur in 2004 with participating local, state, and federal agencies.	Port of Seattle	
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	In 2003, WDFW created SalmonScape, a website of interactive maps featuring information on Washington salmon populations. It is found at <a href="http://wdfw.wa.gov/mapping/salmonscape">http://wdfw.wa.gov/mapping/salmonscape</a> SalmonScape helps salmon recovery planners identify and prioritize habitat restoration activities that offer the greatest benefit to fish.  For local governments involved in growth management planning, the site can aid in the review of critical area ordinances by indicating the presence of salmon species and the habitat areas most important to maintaining salmon production.	Washington Department of Fish and Wildlife	No effect
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated	In 2000-2001, Audubon co-sponsored a water-typing survey of all Vashon-Maury streams with Washington Trout. In 2002, Audubon made several large maps of the stream types.	Vashon-Maury Island Audubon Society	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	with that habitat.			
WW 1	Develop an inventory of currently productive fish habitat based on the Reconnaissance Assessment and additional research, and identify the habitat-forming processes associated with that habitat.	This was identified as Strategic Assessment Task 3. Forum and Technical Committee allocated KCD funds to support high priority research. In 2003, completed a Lower Green River habitat survey and a marine shoreline inventory. A Duwamish River inventory will be completed in early 2004.	Technical Committee  King Conservation District (funding)	Idea source
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Jenkins Creek Park previously transferred to City in 2002; City added about 10 acres along Jenkins Creek and a tributary to the park in 2003. City intends to protect fish habitat value of Jenkins Creek.	Covington	Funding rationale
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Lakota Creek stabilization project design completed; construction planned for 2004. Began design phase for stabilization and habitat restoration for East Branch of Lakota Creek. Began design phase for Lakota Creek wetlands/headwaters to East Branch Lakota Creek.	Federal Way	Confirmation
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	The Lake Wilderness Lake Management Advisory Group formed, formalizing an informal process to protect water quality and address aquatic weeds.	Maple Valley	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Habitat protection is considered in conditioning development permits.	Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	King County approved \$450,000 in Conservation Futures Funding (CFT) for Dandy Lake, just south of the Green River Gorge. Acquisition of 40 acres in 2004 will preserve the lake as well as the surrounding mature forest.	Middle Green River Coalition King County	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	The cities and the county, in cooperation with the Port of Seattle and WSDOT, worked on the Miller Creek Basin Plan. Plan addresses both stormwater control and fish habitat. Effort includes field research, hydrologic models, and identification of potential water	Burien Normandy Park SeaTac	No effect
		quantity and quality improvements to aid in habitat restoration. Two public meetings were held in 2003 and at least two more are scheduled for 2004. A draft basin plan is being prepared and will be transmitted to the appointed and elected officials of the project partners in 2004 after public review.	Fort of Seattle  Washington State Department of Transportation	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	The Port's harbor-wide restoration plan noted in WW1 has the goal of meeting port facility needs coincident with the aquatic habitat restoration objectives of agencies and jurisdictions concerned with migratory fish in WRIA 9. The harbor-wide plan includes intertidal habitat restoration sites in south Elliott Bay and the Duwamish Waterway, with seven sites identified, distributed over 4.4 miles of the Duwamish Waterway. Restoration actions consistent with migratory fish habitat improvement objectives identified by participating agencies would be linked with potential port marine terminal infrastructure redevelopment projects. Additional restoration planning and site evaluation will take place in 2004.	Port of Seattle	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	In 2003, the Department continued moving forward with a proposal to establish a Maury Island Aquatic Reserve. If established, the reserve would help protect nearshore rearing habitat of salmon and vital forage fish habitat.	Washington State Department of Natural Resources	No effect
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	The Department conducted a transfer involving 4 parcels totaling 270 acres. The estimated total value was \$3.3 million. The final result will be to protect island streams that serve, in part, as chinook habitat.	Washington State Department of Natural Resources	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified	MSRFEG built livestock watering site on Newaukum Creek North Fork to reduce sediment entering the stream.	Mid-Sound Regional Fisheries	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	important habitat.		Enhancement Group	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	In 2003, purchased 2 acres to add to 25 acres already preserved. Preservation effort focuses on Shadow Lake bog at headwaters of Jenkins Creek. Educated 2,800 persons on water quality and role of wetlands in watershed held. Conducted mycological surveys and cataloged species specific to the bog area working with Puget Sound Mycological Society and University of Washington. Expected to purchase 17 acre property in early 2004.	Save Habitat And Diversity Of Wetlands (SHADOW)	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	In 2002 and 2003, the Cascades Conservation Partnership led an effort to raise nearly \$2 million to protect through purchase the Sawmill Creek basin in the Upper Green River Subwatershed. In 2004, it is expected that transactions will result in ownership of the parcel by the City of Tacoma with a conservation easement held by the Cascade Land Conservancy. (Tacoma is contributing \$350,000 to the purchase contingent on CCP reaching its fundraising goal.)	Cascades Conservation Partnership Cascade Land Conservancy Tacoma	
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Purchased 5 acres for permanent protection in the Shinglemill Salmon Preserve on Vashon Island (adding to 35 acres purchased in 2002).	Vashon-Maury Island Land Trust Vashon Park District	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Undertook negotiations to purchase 83 acres of headwaters, wetlands, and riparian forest of Judd Creek. Purchases by King County (completed in early 2004) will lead to permanent protection, with maintenance by the Land Trust.	Vashon-Maury Island Land Trust King County	No effect
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	Secured a conservation easement covering 28 acres including the mouth and delta of Christensen Creek.	Vashon-Maury Island Land Trust  Cascade Land Conservancy  King County	No effect
WW 2	Protect habitat and habitat-forming processes identified in WW Action 1 or where other efforts have identified important habitat.	<ul> <li>King County has acquired over 165 acres to protect high value habitat including:</li> <li>116 acres at Kanaskat</li> <li>15 acres along the Green River east of Auburn</li> <li>30 acres near Bass Lake</li> <li>6 acres near the mouth of Newaukum Creek</li> <li>The County also acquired a 7 acre conservation easement along Newaukum Creek north of Enumclaw as part of the Big Spring Creek Natural Area.</li> </ul>	King County	Confirmation
WW 3	Determine fish use and habitat priorities within jurisdictions.	Identified need for additional aquifer protection and water quality analysis to be prepared in 2004.	Covington	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 3	Determine fish use and habitat priorities within jurisdictions.	Fish habitat assessment conducted on East Branch of Lakota Creek as part study and design.	Federal Way	Confirmation
WW 3	Determine fish use and habitat priorities within jurisdictions.	See Miller Creek Basin Plan below for WW Action 11.	Normandy Park	No effect
WW 3	Determine fish use and habitat priorities within jurisdictions.	In 2003, City undertook a city-wide spawning survey.	Kent	Confirmation
WW 3	Determine fish use and habitat priorities within jurisdictions.	Completed a fish distribution report for streams within City limits in 2002.	Renton	Confirmation
WW 3	Determine fish use and habitat priorities within jurisdictions.	Seattle's Urban Blueprint was revised based on comments and issued as a final document.  Fish distribution in Seattle's major creeks was documented.  Nearshore research examined fish usage of the marine nearshore along both the WRIA 8	Seattle	No effect
WW 3	Determine fish use and habitat priorities within jurisdictions.	and WRIA 9 shorelines of Seattle.  King County prepared a document titled "Lower Green River Corridor Assessment" that identifies important fish and wildlife habitat in need of protection.	King County With technical support from Kent, Tukwila, and Auburn	Confirmation
WW 3	Determine fish use and habitat priorities within jurisdictions.	Consistent with preparation of the harbor-wide restoration plan noted above, the Port is focusing on balancing potential water-dependent development uses and activities with aquatic habitat restoration actions in light of priorities for fish use and habitat identified by local, state, and federal entities.	Port of Seattle	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		In 2004, it is anticipated that areas with high priority for aquatic habitat restoration will be identified and designated.		
WW 4	Apply existing incentives (and where necessary, develop new incentives) for protection of salmon habitat in WRIA 9.	As of the beginning of 2004, there are in WRIA 9, 160 landowners protecting 1,789 acres under the Public Benefit Rating System. Last year 16 landowners enrolled 142 PBRS acres in WRIA 9.  As of the beginning of 2004, there are in	King County	
		WRIA 9, 116 landowners (properties) managing 1,315 acres under the Timber Land incentive program.		
WW 4	Apply existing incentives (and where necessary, develop new incentives) for protection of salmon habitat in WRIA 9.	Ecology's Water Right Acquisition Strategy may be used/applied to obtain existing out of stream diversion water rights and transfer the water via the Trust Water Rights program to enhance instream flows.  http://www.ecy.wa.gov/programs/wr/instream -flows/wacq.html	Washington State Department of Ecology	No effect
WW 5	Identify existing educational and outreach materials for promoting salmon conservation messages and make them available for use by all on a website or on loan.	As of 2003, all WRIA 9 cities and King County have completed signage at major road and trail crossings of streams and rivers in the watershed.	All jurisdictions	
WW 5	Identify existing educational and outreach materials for promoting salmon conservation messages and make them available for use by all on a website or on loan.	Seattle continued its extensive education and outreach programs in Parks, Seattle Public Utilities, and Seattle City Light. Materials are available for use by others.	Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 5	Identify existing educational and outreach materials for promoting salmon conservation messages and make them available for use by all on a website or on loan.	In 2003, Covington Water District organized its annual water education festival focusing on elementary students held at Highline Community College. Multiple partners provided staff support.	Auburn  Kent  Covington Water District  Highline Water District  Soos Creek Water & Sewer District  South King County Regional Water Association	No effect
WW 5	Identify existing educational and outreach materials for promoting salmon conservation messages and make them available for use by all on a website or on loan.	Flaming Geyser State Park installed interpretive signs focused on salmon habitat in 2002. In late 2003 and early 2004, the park completed an ADA-accessible trail to these signs using pervious concrete.	Washington State Parks	No effect
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	"Natural Yard Care" brochure delivered to City residents.	Des Moines	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	City implemented Natural Yard Care program in Steel Lake basin in 2003 involving 30 households.	Federal Way	Idea source
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	Once Shoreline Master Plan approved by State, City will begin outreach program to discourage use of pesticides and fertilizers.  In all plats, City notes that the property is in a sensitive area and discourages use of pesticides and fertilizers.	Maple Valley	
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	City promotes natural yard care program.  Aquifer protection education program targets entire city.	Renton	Confirmation
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	King County managed the natural yard care program focused on training groups of neighbors in natural yard care techniques.  County partnered with local cities to carry these out.	King County Federal Way Seattle	
		In 2004, Burien and Covington will be added to this program.		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	City conducted outreach programs for its pre- existing Salmon Friendly Gardening program.  City has many ongoing stewardship programs including a creeks stewardship program.  City conducted a rain barrel program focused on water conservation for lawn and garden	Seattle	No effect
WW 6	Encourage people to contribute personally to salmon conservation through high-visibility, enticing outreach efforts focused on the theme of lawn and garden care.	watering.  District includes regular articles on natural yard care in its customer newsletter. Created a "water wise" demonstration garden and runs seminars for customers to encourage gardens that conserve water and minimize use of pesticides and herbicides.	Covington Water District	
WW 7	Improve enforcement of existing regulations that protect salmon and salmon habitat.	Continued water quality inspection and enforcement program (180 total inspections to date).  Conducted macroinvertebrate sampling on Lakota and Joe's Creek in 2003.	Federal Way	Confirmation
WW 7	Improve enforcement of existing regulations that protect salmon and salmon habitat.	In 2003, City laid groundwork for improved enforcement of water quality regulations by initiating the implementation of NPDES permit conditions.	Kent	Confirmation
WW 7	Improve enforcement of existing regulations that protect salmon and salmon habitat.	Development effectively curtailed around one wetland due to wetland delineation.	Maple Valley	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 7	Improve enforcement of existing regulations that protect salmon and salmon habitat.	In 2002, Department of Design, Construction, and Land Use Site Development Team began visiting all sites with ground disturbance to better assess existing conditions and requirements prior to permit applications submittal: <a href="http://www.cityofseattle.net/dclu/news/preapp.htm">http://www.cityofseattle.net/dclu/news/preapp.htm</a> Additional staffing was added to this program in 2003.	Seattle	No effect
WW 7	Improve enforcement of existing regulations that protect salmon and salmon habitat.	Three enforcement staff are funded annually by King County's Rural Drainage Program.	King County	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	City continued efforts in the development of a Sensitive Areas Ordinance. (CAO completion planned for 2004.)	Auburn	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	Completed in November 2003.	Burien	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	Completed in 2002.	Federal Way	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers	City continuing to revise Critical Areas Ordinance. (CAO completion planned for	Kent	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	and improve them where necessary to maintain functions that protect fish habitat.	2004.)		
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	Shoreline Master Plan approved in 2002 and approval pending from State agencies. Plan would expand buffers and setbacks. Permits would be required for more activities, such as dock replacement, than in the past.	Maple Valley	Confirmation
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	City began updating Critical Areas Ordinance and expects to complete it in 2004.	Normandy Park	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	In 2003, City drafted initial version of stream buffer standards. City expects to adopt in 2004.	Renton	Confirmation
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	City continued reviewing its Environmentally Critical Areas ordinance. Adoption of new provisions is expected during 2004.	Seattle	No effect
WW 8	Evaluate adequacy of existing regulations to protect riparian buffers and improve them where necessary to maintain functions that protect fish habitat.	In 2003, King County moved forward with its Critical Areas Ordinance through two formal public comment periods, 13 public meetings were held, meetings were held with unincorporated area councils and other community groups, extensive information was published via the web and public comments	King County	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		were carefully considered. Significant changes were made between the first and second public review drafts, specifically as a result of public comment. In addition, the county completed it Best Available Science review and made it available for public review. The county expects to take action on the ordinance in 2004.		
WW 9	Promote the use of alternative shoreline protection techniques.	Shoreline Master Plan approved in 2002 and approval pending from State agencies. Plan would promote "softer" techniques and preservation/restoration of riparian vegetation.	Maple Valley	Confirmation
WW 9	Promote the use of alternative shoreline protection techniques.	City worked with willing homeowners to do experimental projects. City worked with homeowners that are applying for shoreline exemptions for work on existing bulkheads that need repair and requires alternative protection where appropriate.	Seattle	No effect
		Seattle Parks is committed to soft shore protection at Lincoln Park (in conjunction with COE), Lowman Beach, and Cormorant Cove.		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 9	Promote the use of alternative shoreline protection techniques.	Partners sponsored a day-long workshop called "Living by Water: Beaches and Bulkheads" in May 2003 on Vashon/Maury Island. It featured presentations on "soft" bulkheads or alternative bank stabilization methods, the significance of the nearshore for juvenile salmon habitat (plus other marine species), characteristics of healthy shoreline vegetation, and restoration.	Vashon-Maury Audubon Society King County	Confirmation
WW 9	Promote the use of alternative shoreline protection techniques.	The Aquatic Habitat Guidelines collection was begun by a consortium of public agencies in 2002 to assist property owners, planners, designers and regulators protect and restore marine, freshwater and riparian fish and wildlife habitat. These guidelines provide "how to" guidance that, while scientific in approach, can be understood and used by volunteers, planners, designers and managers of aquatic restoration projects and facilities. In 2003, the consortium completed the Integrated Streambank Protection Guidelines document in this series to provide a resource for property owners and planners to protect and restore streamside and nearshore habitats. Previously-completed guides address fishways, culverts, and screens for water intakes.  Website: http://www.wdfw.wa.gov/hab/ahg/	Washington Departments of Fish and Wildlife, Transportation, and Ecology  U.S. Army Corps of Engineers  U.S. Fish and Wildlife Service	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 9	Promote the use of alternative shoreline protection techniques.	Three port-owned marine terminal improvement projects in 2003 employed alternative shoreline construction techniques beneficial to aquatic area resources important to migratory fish. Approximately 1800 creosote piling were removed from four locations in south Elliott Bay and the East and West Waterways. Alternative designs were used to avoid use of in-water treated wood materials and, in instances where in-water replacement structures were required, appropriate durable, non-contaminating piling were employed. Finally, clean sediment cap materials included approximately 12 acres, changing subtidal contaminated sediments to clean intertidal and shallow subtidal substrate areas.	Port of Seattle	
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	In 2002, City reorganized staff assign these responsibilities to construction inspection personnel.	Auburn	No effect
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	City has beefed up inspection for erosion and sediment control for single-family residential starts using new inspector.	Federal Way	Confirmation
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	In 2003, City allocated funds for implementation of the erosion and sediment control recommendations developed by consultant in previous years. (Associated with NPDES permit provisions.)	Kent	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	Upgraded water quality features (sediment traps) on five water quality facilities. Installed surface water facilities with water quality features to road improvement project.	Maple Valley	Confirmation
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	In 2002, City developed a handout to contractors who are constructed single family homes on existing platted lots to educate them about erosion control measures. (City erosion and sediment control standards, inspection and enforcement will be reviewed as part of WW Action 11 in 2004.)	Renton	Confirmation
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	Seattle DCLU inspected Best Management Practices during construction to make sure that they are appropriately installed and functioning correctly. Seattle continued preparation of a new Drainage Comprehensive Plan that may affect stormwater standards to increase erosion controls. The Plan will be in public review in 2004. The Natural Systems program at High Point in West Seattle is focused on reducing pollution and sedimentation in streams by increasing groundwater infiltration. <a href="http://www.cityofseattle.net/util/NaturalSystems/default.htm">http://www.cityofseattle.net/util/NaturalSystems/default.htm</a> <a href="http://www.ci.seattle.wa.us/util/SEAStreets/">http://www.ci.seattle.wa.us/util/SEAStreets/</a> <a href="http://www.ci.seattle.wa.us/util/SEAStreets/">Seattle Parks used Best Management Practices and standard operating procedures that are consistent with the Tri-County</a>	Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		Regional Road Maintenance Program Guidelines, to minimize sediment/erosion, contain pollutants and maximize habitat improvements. Training staff is underway.		
WW 10	Evaluate and improve erosion and sediment control programs to reduce sediment entering salmon-bearing streams.	See also WDFW et al. entry for WW Action 9 above		No effect
WW 11	Adopt stormwater standards that protect salmon.	NPDES Phase II permit application submitted in 2003.	All WRIA 9 cities except Seattle (Seattle addressed previously)	No effect
WW 11	Adopt stormwater standards that protect salmon.	Stormwater policies encouraging low impact development were approved. Stormwater manual expected to be approved in 2004.	Burien	No effect
WW 11	Adopt stormwater standards that protect salmon.	Stormwater code and standards adopted in 2002 with salmon habitat protections.	Covington	No effect
WW 11	Adopt stormwater standards that protect salmon.	Construction began in 2003 on stormwater retrofit project for Pacific Highway South (expected to be completed by 2005).	Des Moines	No effect
WW 11	Adopt stormwater standards that protect salmon.	Underway, but slow progress. These efforts have no capital budget and rely on city staff to complete. As part of the City's Comp Plan update in 2004, the storm drain component will be updated.	Enumclaw	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 11	Adopt stormwater standards that protect salmon.	City completed new version in 2002 (based on King County 1998 manual). City will evaluate new King County manual when it becomes available.	Kent	No effect
WW 11	Adopt stormwater standards that protect salmon.	Sensitive Lake Treatment Standard (from KC Surface Water Design Manual) adopted previously for new development and modifications to storm drain systems that drain into a lake.	Maple Valley	No effect
WW 11	Adopt stormwater standards that protect salmon.	City adopted new drainage regulations in 2003 and created a Stormwater Utility.	Normandy Park	No effect
WW 11	Adopt stormwater standards that protect salmon.	In 2004, City will begin reviewing stormwater standards and updating to be in compliance with Phase II NPDES regulations.	Renton	Confirmation
WW 11	Adopt stormwater standards that protect salmon.	City continued updating its Drainage Comprehensive Plan.	Seattle	No effect
WW 11	Adopt stormwater standards that protect salmon.	Improved stormwater standards were included in the overall CAO/Stormwater Ordinance update in response to the ESA, Clean Water Act and Growth Management Act. The County is proposing 65/10 standard in rural areas (65% forest retention and 10% impervious surface limitations). Also included would be lowered drainage review thresholds and thresholds for new impervious surfaces requiring a flow-control facility or best management practices.	King County	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	Protocol for stormwater system maintenance was adopted in 2002; it addresses sediment.	Covington	No effect
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	In 2003, City inventoried 80% of drainage facilities, locating and identifying all outfalls.	Des Moines	No effect
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	Underway, but slow progress. These efforts have no capital budget and rely on city staff to complete.	Enumclaw	
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	In 2003, completed inspection of all 600 private stormwater facilities in the City.	Federal Way	No effect
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	Stormwater systems and facilities addressed through roads maintenance Best Management Practices; see WW Action 13 below.	Kent	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	City continued maintenance program to systematically maintain stormwater system begun in 2002. In 2003, catch basin were cleaned regularly and broken catch basins were repaired. City began regularly sweeping streets, reducing the input sediment and debris to stormwater system.	Maple Valley	Confirmation
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	City increased its emphasis on source control and hired new inspectors to assist businesses identify areas for improvement. City, partnering with the County and Ecology, conducted over 400 business inspections focused on areas draining to the Duwamish.	Seattle	No effect
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	Maintenance standards for stormwater systems are contained in the King County Surface Water Design Manual. The manual was updated in 2002-2003 to reflect ESA, Clean Water Act and Growth Management Act requirements. Expected approval of the manual in 2004.	King County	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 12	Develop programs and protocols for the maintenance of stormwater systems and facilities to reduce entry of sediment and other pollutants to salmon streams.	Ecology convened the Westside Stormwater Group to address municipal stormwater issues. The group was comprised of cities, counties, business, environmental interests, agriculture, ports and state agencies.	Washington State Department of Ecology	No effect
		Ecology will begin drafting Phase II municipal stormwater permits in 2004. Ecology plans on having the draft permit available for review and comment in late 2004 or 2005, with general permits available in 2005.		
		For Western Washington, Ecology intends to issue a joint Phase I and Phase II permit. Information can be found in Ecology's January 2004 Municipal Stormwater NPDES Permit Report to the Legislature. The Report can be found at the following website:  http://www.ecy.wa.gov/pubs/041 0010.pdf		
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	A maintenance manual was developed prior to 2002.	Auburn	No effect.
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon	City is using WSDOT road maintenance manual.	Des Moines	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 13	habitat.  Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	Informally implementing Tri-County Road Maintenance Plan in 2003.	Federal Way	No effect
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	City is implementing the Tri-County roads maintenance Best Management Practices.	Kent	No effect
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	City adopted Tri-County Regional Road Maintenance guidelines.	Maple Valley	No effect
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	City adopted in 2002 and is following the Road Maintenance BMP standards developed by the Tri-County effort.	Renton	Confirmation
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	City is implementing the Tri-County roads maintenance Best Management Practices and is formalizing and documenting its practices.	SeaTac	No effect
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon	City developed a program that substantially adopts the Tri-County Road Maintenance Program.	Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	habitat.	City-wide training on BMPs for road maintenance was underway in 2003-2004 across several departments.		
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	County is implementing the Regional Road Maintenance ESA Program Guidelines on its road maintenance projects.	King County	No effect
WW 13	Review road maintenance practices and adopt written operating procedures to reduce potential impacts to salmon and salmon habitat.	A road assessment of stream-adjacent roads on Tacoma Water lands identified in the Forest Road Inventory of RMB-1 (Howard Hanson) as having the potential to deliver sediment to typed streams was conducted in June 2002. Twenty road segments were evaluated in 2002, covering 14 miles. Of these 20 road segments, a total of 8.5 miles were found to be delivering water to the adjacent stream. The Road Sediment Reduction Plan (RSRP, 11/4/02) recommended various remedies and priority for minimizing road sediment delivery to the adjacent stream. Remedies on the Northside Road were completed in 2002. In 2003, assessments covered 10 road segments totaling 3 miles of road in the Lester area. Once the road is transferred from Forest Service purview to Tacoma, TPU will follow sediment recommendation practices. These activities are performed pursuant to the terms of the Tacoma Habitat Conservation Plan.	Tacoma (in Upper Green River sub- watershed)	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 14	Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon habitat.	City adopted standards, policies and procedures in 2003. Further minor revisions expected in 2004.	Covington	
WW 14	Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon habitat.	City began Stormwater Pollution Prevention Plans for all municipal facilities.	Federal Way	No effect
WW 14	Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon habitat.	City previously completed audit of all city- owned facilities (parks and others) to find ways to conserve water.  Best Management Practices identified in 2001 began to be implemented in 2002 and continued in 2003; Best Management Practices address activities such as vehicle washing and pesticide use.  In 2003, completed draft integrated pest management (IPM) program (to be finalized in 2004); scope covers Kent and areas outside of Kent (such as Maple Valley) where Kent well fields; in cooperation with Covington Water District and Water District 111.	Kent	Confirmation
WW 14	Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon	In 2003, City began developing integrated pest management (IPM) program for parks (to be finalized in 2004).	Renton	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 14	habitat.  Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon habitat.	City has a pesticide reduction program for all departments with property or road ROW responsibilities. <a href="http://www.ci.seattle.wa.us/environment/pesticides.htm">http://www.ci.seattle.wa.us/environment/pesticides.htm</a>	Seattle	No effect
		Seattle Parks previously developed a pesticide free parks program.		
		Parks continued overall pesticide reduction activities begun in 2002. <a href="http://www.ci.seattle.wa.us/parks/horticulture/pesticide.htm">http://www.ci.seattle.wa.us/parks/horticulture/pesticide.htm</a>		
		Parks has Environmental Stewardship Programs for the golf courses, including a pesticide reduction goal and proposed water testing.		
		Parks has Landscape, Horticulture and Forestry Best Management Practices that protect salmon and salmon habitat.		
WW 14	Review parks and grounds maintenance procedures and adopt written best management practices that protect salmon and salmon habitat.	King County completed its written best management practices in 2002. Included is integrated pest management. Natural areas management addresses habitat protection.	King County	No effect
WW 14	Review parks and grounds maintenance procedures and adopt	Port has continued to implement work practices at all shoreline properties which	Port of Seattle	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	written best management practices that protect salmon and salmon habitat.	require "organic" landscape practices, including no use of any pesticides or manufactured fertilizer, no use of pesticides, and re-use of site-generated organic waste as mulch and compost. This is complemented with use of native vegetation and limited (to term of establishment) water/irrigation use. The Port is continuing with activities replacing landscape lawn and ornamental plantings with native trees and shrubs, thereby reducing water use and maintenance costs. These policies cover 45 acres of grounds and 11 sites.		
WW 15	Develop a comprehensive, WRIA-wide process to identify, develop, and prioritize projects that benefit salmon and carry out the WRIA 9 strategy.	Progress on WW Action 15 was made in 2003 through the WRIA 9 Habitat Work Schedule in the near-term and the Habitat Planning process in the longer term. The Work Schedule has been developed as a process to identify and document a portfolio of habitat projects in WRIA 9.  In 2003, this portfolio of projects was created and made available on the web through an interactive database and map-set that:  • documents currently identified projects;  • allows periodic updates of project information;  • provides the management tool for identifying future habitat acquisition and restoration projects that address salmon	WRIA 9 staff	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		<ul> <li>conservation and recovery needs; and</li> <li>assists in coordination of project prioritization and sequencing.</li> </ul>		
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Stream Teams developed for all Puget Sound creeks (completed and fully implemented in 2003). Includes water quality monitoring and fish counting.	Federal Way	Confirmation
		Conducted three stewardship events collecting trash, removing invasive plants and planting native trees at Lakota Creek in partnership with Decatur High School.		
		Steel Lake Management District #1 formed in 2003.		
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Continued tree planting program involving elementary and high school students (joint program with King County and others).	Kent	Confirmation
		Hired Washington Conservation Corps crew for 2003, which carried out weed control, erosion repair, and restoration of stream buffers. WCC also participated in restoration work on capital improvement projects.		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Seattle began new Creeks Stewardship and BackYard Stewardship programs to augment the pre-existing naturalists programs.  http://www.ci.seattle.wa.us/parks/Environment/index.htm http://www.cityofseattle.net/util/urbancreeks/creeksteward.htm http://www.cityofseattle.net/util/urbancreeks/backyard.htm  The ProParks Levy includes funding environmental stewardship. Parks provided volunteer opportunities for creekside renovation and stewardship.	Seattle	No effect
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	King County provided three stewards to support education and volunteer stewardship efforts among other responsibilities in three areas of WRIA 9:  • Vashon/Maury Island • Middle and Lower Green • Enumclaw Plateau (Newaukum Creek)	King County	Confirmation
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	City was one of three partners to host a project through the Forum-sponsored stewardship+naturalist effort. City provided staff and equipment.	Des Moines  WRIA 9 staff  King Conservation District (funding)	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	County was one of three partners to host a project through the Forum-sponsored stewardship+naturalist effort. County provided staff and plants. (See also WW 17 entry for King County.)	King County WRIA 9 staff King Conservation District (funding)	Confirmation
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Port was one of three partners to host a project through the Forum-sponsored stewardship+naturalist effort. Port and City provided staff and equipment. Port provided plants and fencing material.	Port of Seattle  WRIA 9 staff  King  Conservation  District  (funding)	Confirmation
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	The Port multiple volunteer events in 2003. These involved native plant installation and stewardship at port habitat restoration sites.	Port of Seattle	
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Organized several cleanup days on roads whose ditches drain into Soos Creek. With South King County Chapter of Sierra Club, conducted ivy removal. Organized several nature walks in Park. In 2004, nature walks will be expanded to include focus on salmon.	Friends of Soos Creek Park	
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	As part of an annual program, Saltwater State Park staff introduced thousands of local children to salmon habitat (freshwater and nearshore) provided at the park and involved them in volunteer restoration activities.	Washington State Parks	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	MSRFEG and TU volunteers distributed 18 tons of salmon carcasses into the Green River and Newaukum Creek for nutrient enhancement: - 1,063 chinook adult carcasses - 3,435 coho adult carcasses	Mid-Sound Regional Fisheries Enhancement Group Trout Unlimited	
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	The first annual Enumclaw Salmon Festival was spearheaded by Mid-Sound with assistance from the City of Enumclaw and others. It was attended by over 1,000 persons and 60 persons participated on salmon van tours that took people to see salmon in Newaukum Creek and the Green River.	Mid-Sound Regional Fisheries Enhancement Group Enumclaw	No effect
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	Trout Unlimited, Cities of Kent and Federal Way, and other local partners, put on Kent Fishing Derby and Steel Lake Fishing Derby in Kent and Federal Way respectively.  Derbies included presentations by WRIA 9 staff regarding salmon habitat conservation and stewardship, reaching over 1,000 children and adults.	Trout Unlimited Kent Federal Way WRIA 9 staff	Confirmation
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	DRCC continued carrying out comprehensive public education, outreach, and involvement programs in south Seattle regarding pollution issues and cleanup plans associated with the Lower Duwamish Superfund listing. Hosted free boat tours of the Duwamish.	Duwamish River Cleanup Coalition	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	<ul> <li>FWC organized and supported a variety of activities in the Fauntleroy watershed in West Seattle, including:</li> <li>Staging of large woody debris for mid-2004 installation in 2,200 linear feet of channel in the upper creek, with attendant neighborhood publicity (Seattle Public Utilities, NOAA Fisheries, EarthCorps)</li> <li>Clearing spawner access from Fauntleroy Cove (Seattle Public Utilities, WDFW, EarthCorps)</li> <li>Completing a vegetation management plan for Fauntleroy Park to guide habitat decisions at the creek headwaters (Seattle Parks)</li> <li>Engaging 250 students in field trips, work parties, and research, including annual monitoring of macroinvertebrates and a year-long study of pet waste as a contributor to high fecal counts in the cove</li> <li>Conducting volunteer smolt trapping and salmon counting (Seattle Public Utilities)</li> </ul>	Fauntleroy Watershed Council Seattle Washington Department of Fish and Wildlife	No effect
WW 16	Create combined naturalist and stewardship activities across WRIA 9.	ECOSS carried out education/awareness program on salmon focusing on the Latino community on the Duwamish. Program elements included painting a mural, salmonfriendly auto care training (Spanish language); gourmet salmon cooking; salmonfriendly home care, and a children's play on	Environmental Coalition of South Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		how to protect salmon (Spanish language). Program was funded in part with a grant from the Northwest Fish and Wildlife Foundation.		
WW 17	Encourage the restoration of riparian buffers.	Small project completed on Massey Creek as part of WW Action 16 (above).	Des Moines	No effect
WW 17	Encourage the restoration of riparian buffers.	City removed invasive plants from private and public storm water facilities.	Federal Way	Confirmation
		Completed restoration plans for mainstem and West Branch of Lakota Creek. Began restoration plans for East Branch Lakota Creek.		
WW 17	Encourage the restoration of riparian buffers.	Under 2002 Shoreline Master Plan, new development and redevelopment would be required to reestablish riparian vegetation as permit condition.	Maple Valley	Confirmation
WW 17	Encourage the restoration of riparian buffers.	The Creek Stewardship program and the Backyard Stewardship Program (described in WW 16) and ECA codes also restored riparian buffers.	Seattle	No effect
		Parks Urban Forestry program developed vegetation management plans and implemented forest restoration along creeks, streams and shorelines. Parks' volunteers worked to restore native plants and improve waterways.		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 17	Encourage the restoration of riparian buffers.	Codiga Farm restoration began. The 4-acre project acre was excavated and contoured. 47 pieces of large woody debris were placed. The tidal marsh was opened to the river. Planting was to be done in 2004.	Tukwila  Army Corps of Engineers	
WW 17	Encourage the restoration of riparian buffers.	County planted over 3,000 trees on approximately 15 acres with the Green River riparian buffers on county-managed land in 2003.  Drainage and erosion problems on Shinglemill Creek were minimized using wattles made of on-site materials.	King County	Confirmation
WW 17	Encourage the restoration of riparian buffers.	Held meeting for landowners on Newaukum Creek to encourage stewardship and restore degraded land. King Conservation District and King County staff also participated.	Mid-Sound Regional Fisheries Enhancement Group	
WW 17	Encourage the restoration of riparian buffers.	In 2003, the partners began exploring the creation of a community-based movement to protect Little Soos Creek through conservation easements and the Public Benefit Rating System. Proposed activities include restoration on Institute property with expansion of efforts to interested neighbors. By the end of the 2003, a number of land owners along the creek had agreed to participate.	Middle Green River Coalition  Institute for Community Leadership  Covington  King County	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 17	Encourage the restoration of riparian buffers.	Ecology created and planned for the implementation of Total Maximum Daily Loads (TMDLs) for pollutants in the Green/Duwamish. Ecology selected Longfellow Creek and Des Moines Creek for initial TMDLs for fecal coliform. Ecology is considering including restoration of riparian buffers to address water temperature and other parameters on 303(d) listed waterbodies.	Washington State Department of Ecology	No effect
WW 17	Encourage the restoration of riparian buffers.	Port installed additional/supplemental native riparian vegetation at two sites in 2003 and installed approximately 0.4 acres of new emergent vegetation at a single site. An additional 0.4 acre riparian restoration site is planned for 2004.	Port of Seattle	
WW 17	Encourage the restoration of riparian buffers.	In a new project, Mid-Sound restored 870 feet of instream habitat on Newaukum Creek by removing 44,000 sq ft of blackberry and planting native plants. 21 pieces of engineered large woody debris and jams were installed.  In maintenance of projects from previous years, Mid-Sound planted 12,000 sq ft with native plants and weeded 24,000 sq ft.	Mid-Sound Regional Fisheries Enhancement Group	
WW 17	Encourage the restoration of riparian buffers.	Normandy Park Community Club and Trout Unlimited secured permits, obtained a \$37,000 grant, and completed designs for riparian restoration of the lower portions of	Normandy Park Community Club	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		Miller and Walker Creek in Normandy Park. Construction was expected to begin in 2004.		
WW 17	Encourage the restoration of riparian buffers.	See also WDFW, WSDOT, WSDOE et al. entry for WW 9.		
WW 18	Implement Phase 1 of the Ecosystem Restoration Project.	In 2002, design agreement completed between USACE and King County as local sponsor with support from local jurisdictions.  In 2003, design for five Phase I projects was continued to 60% phase. The decision was made to complete design on three of them. Construction will begin on two of them in 2004. Local partners were successful on lobbying Congressional delegation for Construction New Start funds for the ERP.  In 2003, the second tier of Phase 1 projects (after the first five) were selected.	U.S. Army Corps of Engineers  WRIA 9 jurisdictions  WRIA 9 staff	Idea source
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	City completed a detailed wetland/stream inventory in 2002 that identified some fish passage barriers.	Auburn	No effect
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	Miller Creek Basin Plan field work previously revealed no fish passage blockages in cities other than possibly on Salmon Creek in Burien. Basin Plan examining whether to improve fish passage on Salmon Creek by daylighting portions of the creek and modifying stream crossings on Miller Creek as feasible.	Burien Normandy Park	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	City replaced culvert limiting fish passage on Massey Creek.	Des Moines	No effect
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	Assessed fish passage barriers for Joe's Creek.	Federal Way	Idea source
		Fish passage barriers assessed for Lakota Creek in 2002.		
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	Replaced six culverts to improve flood flow and fish passage on Soosette Creek.	Kent	Confirmation
		Removed culvert on Boeing Creek (Mill Creek-Kent).		
		Removed invasive plants at Clark Lake outlet, improving fish passage. Planted native vegetation.		
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	City identified six passage barriers on Jenkins Creek previously and removed one (2002).	Maple Valley	No effect
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	City replaced culvert under First Ave. S., thereby improving fish passage on Walker Creek.	Normandy Park	No effect
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	If a City or private project involves a stream crossing, the existing or proposed new crossing is reviewed to make sure that it is fish passable. (Fish usage study [WW 3] included inventory of where possible fish passage blockages may exist.)	Renton	Confirmation
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	Fish barrier inventory previously completed for major Seattle creeks.	Seattle	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	New culverts were installed along S. 144 <sup>th</sup> to improve access on Southgate Creek.	Tukwila	
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	County improved fish passage on Judd Creek at SW 216 <sup>th</sup> St. and 107th Ave SW on Vashon Island.	King County	
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	In 2002, Tacoma conducted a Forest Road Inventory in Road Management Block 2 on 51 miles of roads on Tacoma Water land. Collected data will be furnished to the State DNR for the second of two Road Maintenance and Abandonment Plans (RMAP).  In 2003, Tacoma completed fish passage barrier assessments at 21 sites. Assessments confirmed that all are fish passage barriers and surveyed habitat upstream and downstream. Analysis developed cost estimates for replacement and prioritized culvert replacements. Replacement may begin in 2004.  These activities are performed pursuant to the terms of the Tacoma Habitat Conservation Plan.	Tacoma (in Upper Green River sub- watershed)	
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	In 2003, Howard Hanson Dam fish passage project design continued into final stages and went out to bid.	U.S. Army Corps of Engineers	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
WW 19	Evaluate fish passage barriers at the local jurisdiction level.	In 2003, a major fish passage barrier was removed when a double-barreled culvert was replaced with a 60 foot bridge over Sweeney Creek.	Tacoma U.S. Army Corps of Engineers	
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	Monitoring is included in City habitat restoration projects.	Seattle	No effect
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	All County riparian restoration projects were actively monitored by the Resource Coordinator and Basin Steward.	King County	Confirmation
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	Green River Flood Control Zone District projects were monitored for fish utilization by the King County Green River Basin Program. Baseline monitoring occurred at Narita and Segale levees reconstruction/restoration sites. Post-construction monitoring occurred at projects completed in previous years.	Green River Flood Control Zone District (King County, Auburn, Kent, Renton, Tukwila, et al.)	No effect
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	Monitoring plans continued to be developed for the first projects proposed for the Green/Duwamish ERP.	U.S. Army Corps of Engineers	
WW Study	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	Port conducted aquatic habitat attribute monitoring and obtained fish presence and use information at four sites in 2003. These data are used to determine the success of previous aquatic habitat restoration work, plan for new restoration projects, and to aid in conducting in-water construction activities such that potential adverse effects on fish and wildlife are avoided and minimized. Work	Port of Seattle	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		will continue in 2004.		
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	MSRFEG, with help from TU volunteers, monitored a smolt trap on Big Spring Creek to obtain baseline information on fish use.	Mid-Sound Regional Fisheries Enhancement Group	
			Trout Unlimited	
WW Study 1	Monitor habitat restoration projects to determine fish response and apply the information to future projects.	<ul> <li>In 2003, PPS staff and volunteers monitored the following Duwamish restoration projects:</li> <li>Turning Basin (Duwamish)</li> <li>Hamm Creek estuary</li> <li>Puget Creek estuary</li> <li>Terminal 105</li> <li>General Services Administration</li> <li>Monitoring involved training volunteers in May and June 2003 on three procedures for evaluating ecosystem health on site. Over 400 volunteer hours were spent on collecting plant growth data and 40 site checks at all 5 sites.</li> </ul>	People for Puget Sound	No effect
WW Study 2	Identify which factors are limiting to salmon populations by subwatershed.	Volunteers completed stream typing in the smaller urban streams flowing into the lower Duwamish River and the western slopes of West Seattle, SeaTac, Burien, Normandy Park, and Des Moines. Includes evaluation of fish passage blockage. This work began in 2002 and will be completed in 2004.	Washington Trout	
WW Study	Identify which factors are limiting to	Group obtained a grant from the WRIA 9	Trout Unlimited	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
2	salmon populations by subwatershed.	Forum in 2002 to accelerate and expand gathering of data on the macroinvertebrates (insects) in the Green River and its tributaries. This work continued in 2003 and 2004. With the grant, TU volunteers began to process their specimens in a more timely, costeffective fashion. This helps fill a data gap described in the WRIA 9 Reconnaissance Assessment Report.		
WW Study 2	Identify which factors are limiting to salmon populations by subwatershed.	This was identified as Strategic Assessment Task 3 (Current Habitat Conditions), Task 5 (Fish Utilization and Habitat Limiting Factors), and Task 6 (Functional Linkages Evaluation). Portions of Tasks 3, 5, and 6 were completed in 2003; the remainder will be completed by June 2004.	Technical Committee	Idea source
WW Study 2	Identify which factors are limiting to salmon populations by subwatershed.	The Seattle Urban Blueprint (updated in 2003) identified key areas of focus for salmon recovery in each of our aquatic environments. This work was positively reviewed by the NMFS Science Center, UW scientists and others.	Seattle	No effect
WW Study 2	Identify which factors are limiting to salmon populations by subwatershed.	WRIA 9 juvenile salmonid survival studies in the Lower Green and Duwamish (RM 13, RM 7, and RM 2) were carried out by King County in 2003.  Over 60,000 fish were captured with a variety of traps and seining effort in 2003 to study migration and growth of salmon. The study	King County  King Conservation District (funding)	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		targets juvenile chinook in the reach from Soos Creek and to Elliott Bay. Fish were measured and samples of stomach contents, scales, coded wire tags, and otoliths were collected.		
		A draft report is currently being prepared for years 2001-2003 and early results suggest that in terms of limiting factors:  - RM 7 to 5.5 on the Duwamish River are essential rearing juvenile habitat for chinook fry  - hatchery releases are reducing the growth of natural fish.		
		A draft 2001 report was completed in January 2003.		
		A draft report on nearshore beach seining (juvenile fish usage) is expected in the first half of 2004.		
WW Study 3	Develop a research framework for assessing juvenile salmonid survival in WRIA 9.	Workshop with a broad group of scientists held in early 2003 redirected this work. Project developed a conceptual model and a set of high priority hypotheses. Selected hypotheses are being developed into planning level scopes for future research.	Seattle Technical Committee	Idea source
WW Study 4	Support the Green/Duwamish Water Quality Assessment.	King County's implementation of the Green WQA is ongoing. Data were collected on several water quality parameters of interest to	King County with technical support from	Idea source

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		WRIA 9, including water temperature, dissolved oxygen, and benthic macroinvertebrates. Storm and baseflow sampling at 18 study sites was completed in December 2003. A draft report entitled "Green/Duwamish Watershed Water Temperature Report" covering 86 monitoring locations was completed in December 2003. A dissolved oxygen study by the University of Washington was completed in the Mill Creek/Mullen Slough sub-basin (a report is due in early 2004). A second year of Benthic macroinvertebrate monitoring occurred at approximately 80 sites in the Green River basin in late summer 2003. Calibrated watershed models were completed for Springbrook Creek, and under development for the Soos and Newaukum Creek sub-basins.	local cities	
WW Study 5	Conduct an assessment of large woody debris in WRIA 9.	This was identified as Strategic Assessment Task 3 (Current Habitat Conditions). This assessment was completed for the Middle Green in 2002. The assessment was completed for the Lower Green River and the nearshore in 2003.	Technical Committee  King Conservation District (funding)	Idea source
WW Study 6	The WRIA 9 Planning Work Group, WRIA 9 Technical Committee, Central Puget Sound Water Suppliers Forum, and other appropriate	In July 2003, the WRIA 9 Forum approved \$50,000 in KCD funds to support a water quantity assessment in WRIA 9, with an emphasis on the upper Lower, Middle and	Technical Committee WRIA 9 Forum	Idea source

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	agencies should work together to understand and evaluate the water budget for people and fish in the WRIA.	Upper Green sub-watersheds.  The project is addressing portions of WW Study 6, and MG Studies 1 and 3. The information will contribute to our efforts to manage water resources for the benefit of fish and people.	King Conservation District (funding)	
		The project is broken into two Phases:  1) a preliminary assessment of current water quantity conditions (completed in January 2004), and  2) a more detailed assessment, including (a) current-conditions streamflow, (b) groundwater flows and inputs, (c) water balance assessment, (d) fisheries evaluation of streamflows, and (e) issues and management actions.		
WW Study 7	Develop mechanisms to increase collaboration and coordination in scientific work directed toward salmon recovery.	Coordination and collaboration on scientific efforts related to the WRIA 9 Strategic Assessment is integral to most project tasks. The Technical Committee is involved in project scoping and review of technical products and task subgroups oversee specific study efforts. A Salmonid Research Framework, including the development and prioritization of research hypotheses, is near completion (expected March 2004).	Technical Committee	Idea source
	dle Green River Subwatershed Action			
UG 1	Endorse the re-establishment of fish	In 2002, Tacoma began construction on the	Tacoma	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
	passage to and from the Upper Green River subwatershed.	Green River Diversion Fish Ladder/Trap. The trap and sorting facility was under construction in 2002. The ladder was constructed in 2003. Construction will be completed in 2004.		
UG 1	Endorse the re-establishment of fish passage to and from the Upper Green River subwatershed.	Corps is working on components of upstream and downstream passage through a variety of Howard Hanson Dam Second Water Supply projects.	U.S. Army Corps of Engineers	Confirmation
MG 1	Maximize retention of forest cover and minimize impervious surfaces in rural and forest production areas of the Middle Green River subwatershed.	City's clearing code adopted in 2002 provides for very stringent vegetation protection.	Covington	
MG 1	Maximize retention of forest cover and minimize impervious surfaces in rural and forest production areas of the Middle Green River subwatershed.	See King County entries for WW Actions 4 and 8 above	King County	
MG 1	Maximize retention of forest cover and minimize impervious surfaces in rural and forest production areas of the Middle Green River subwatershed.	As part of the Cedar-Green Forest Initiative, King County and the Cascade Land Conservancy applied for a \$2 million Forest Legacy grant in 2003 to acquire conservation easements (remove development rights) for 2,000 acres of commercial timber property in the Enumclaw area. The Project was ranked number one in the Northwest and 6 <sup>th</sup> nationally by the US Forest Service. A FFY 2005 funding decision by Congress is	King County  Cascade Land Conservancy	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
MG 1	Maximize retention of forest cover and minimize impervious surfaces in rural and forest production areas of the Middle Green River subwatershed.	expected late in 2004 or early 2005.  In 2003, CLC worked with some of the large forest land owners in the Middle Green subwatershed in an effort to create a transaction to move development rights from the rural and forest focus areas into a receiving site within the King County UGA boundary.	Cascade Land Conservancy	
MG 2	Identify and pursue opportunities on agricultural lands to enhance or restore high quality salmon habitats while maintaining viable agriculture.	County continued efforts to preserve agricultural land via the Farmland Preservation Program in the Middle Green River Valley and Enumclaw Plateau. County researched, educated, and implemented best management practices that are protective of salmonids and water quality. County worked with farmers to continue implementing farm plans that provide protective buffer to salmon bearing streams.	King County	No effect
		The Agriculture Program provided \$2,500 of match funding to one cooperator to install three Best Management Practices (BMPs) in 2003. The BMPs are: heavy use area protection, manure storage and cross fencing.  Two BMPs (manure storage and roof runoff management) implemented by two cooperators in 2002 were monitored. The match funding for these projects totaled		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		Monitored four 2002 drainage enhancement project that improved water conveyance and quality.		
		Permitted a drainage enhancement project that will improve water conveyance and quality.		
		Developed plans for three drainage enhancement project that will improve salmonid habitat, water conveyance and quality. Pre-project data collected.		
		Conducted a training for ditch contractors about maintenance best management practice. Produced training video.		
		Eight landowners involved with WSU agricultural ditch research project. WSU will evaluate how ditch maintenance affects water quality, salmonid habitat, vegetation, and sediment control. A research demonstration was done during the Harvest Celebration Tour.		
MG 3	Supplement mainstem gravel and large woody debris.	Corps completed gravel replenishment and large woody debris pilot project in 2003 just below the Tacoma Headworks. These projects will be used as demonstration sites	U.S. Army Corps of Engineers	Idea source
		for other similar projects. Observations show gravel was almost immediately used by	Tacoma	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		spawning salmon.		
MG 4	Prevent degradation of important sources of cool, clean water in the Middle Green River subwatershed.	City acquired riparian habitat (from LDS Church) along Newaukum Creek near Big Spring Creek through the Conservation Futures Grant program. City now holds title to this property and in 2003 began working with volunteers to control invasives on site.	Enumclaw	No effect
MG 4	Prevent degradation of important sources of cool, clean water in the Middle Green River subwatershed.	Efforts moved forward to protect Icy Creek, an important source of cold water to the Middle Green. King County approved \$200,000 in Conservation Futures Funding (CFT) for Icy Creek. This adds to 2002 CFT grant money and matching REET funding bringing the total to \$800,000 in funding.  State Parks also received an Interagency	Middle Green River Coalition King County Washington State Parks	
		Committee for Outdoor Recreation (IAC) grant to purchase property along the rim of the Green River Gorge and uplands that include the underground Icy Creek corridor and glacial kettle.		
MG 4	Prevent degradation of important sources of cool, clean water in the Middle Green River subwatershed.	Ecology's creation of and planning for implementation of Total Maximum Daily Loads in the Green/Duwamish should help prevent the degradation of both surface and ground water quality in the middle Green River subwatershed.	Washington State Department of Ecology	No effect
MG Study 1	Assess flow management alternatives in the Middle Green River.	See WW Study 6 above.		
MG Study	Identify gravel source areas in the	No action to date		

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
2	Middle Green River.			
MG Study	Identify and characterize important surface and groundwater inputs to the Middle Green River.	See WW Study 6 above.		Idea source
MG Study 4	Ensure funding for the Green River fish trap for 2003-2005.	Funding apparently secure through 2004.		Idea source
Lower Gree	en River Subwatershed Actions (LG)			
LG 1	Incorporate recommendations that support salmon habitat needs into Mill Creek Reconnaissance and Action Plans developed in WRIA 9, with an emphasis on proposals that support juvenile chinook salmon rearing (to the extent practical within budget constraints and consistent with the goal of protection agricultural lands).	Little work was done on the Mill Creek Action Plan in 2003.  County developed plans for two drainage enhancement project that will improve salmonid habitat, water conveyance and quality in Mill Creek. Collected pre-project data.  Seven landowners involved with WSU agricultural ditch research project. WSU will evaluate how ditch maintenance affects water quality, salmonid habitat, vegetation, and sediment control.	King County Auburn Kent	Confirmation
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Completed 1,400 feet restoration along Mill Creek (Kent). Including placement of large woody debris and planting of native riparian vegetation.	Kent	Confirmation
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	King County prepared a document titled "Lower Green River Corridor Assessment" that identifies important fish and wildlife habitat in need of protection. This effort identified projects that may provide future	King County  With technical support from Kent, Tukwila,	Confirmation

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		sites for restoration.	and Auburn	
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Kent received Salmon Recovery Funding Board grant for purchase of Rosso nursery property for future restoration. City is lead in joint effort with King County and Green River Flood Control Zone District.	Kent King County Green River Flood Control Zone District	Confirmation
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Mullen Slough restoration activities completed in 2003 included restoration design for IDC property.	Auburn Kent	Confirmation
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Began the Johnson (O'Connell) Creek watershed basin plan to address stormwater management and restoration opportunities.	Kent Green River Flood Control Zone District Army Corps of Engineers	Confirmation
LG 2	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Ongoing levee and revetment repair that included improvements to fish habitat. Restoration of Narita and Segale levee projects included placement of large woody debris and native vegetation.	Green River Flood Control Zone District (King County, Auburn, Kent, Renton, Tukwila, et al.)	No effect
LG 3	Identify and pursue opportunities on agricultural lands to enhance or restore high quality salmon habitats while maintaining viable agriculture.	County continued efforts to preserve agricultural land via the Farmland Preservation Program in the Lower Green River Valley. County researched, educated,	King County	

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		and implemented best management practices that are protective of salmonids and improve water quality. County worked with farmers to continue implementing farm plans that provide protective buffer to salmon bearing streams.		
LG Study 1	Conduct Lower Green River baseline habitat mapping.	This was identified as Strategic Assessment Task 3 (Current Habitat Conditions). Completed in 2003.	King County  King Conservation District (funding)	Idea source
LG Study 2	Establish a water-quality sampling site at River Mile 21.	A sampling location has been established. The locator for the sample location downstream of Mullen Slough is G319. Samples have been collected at this location from January 1, 2002 to present.	King County	
Elliott/Bay	<b>Duwamish Subwatershed Actions (EB</b>		1	1
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Feasibility studies completed on several sites. Concern for salmon was kept a visible part of the waterfront seawall project, the Olympic Sculpture Park, and other major projects.	Seattle	No effect
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Funding was secured for the acquisition of Grandmother's Hill in Tukwila (purchase scheduled for early 2004). This will provide a stretch of shoreline for restoration as well as creating an interpretive site.	Tukwila  Cascade Land Conservancy  King Conservation District	Funding

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
			(funding)	
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	During the winter, construction of a half acre of wetlands was completed at Cecil B. Moses park.	King County	
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Detailed design began for Site 1: North Winds Weir as part of the Green/Duwamish Ecosystem Restoration Project.	U.S. Army Corps of Engineers King County	
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	Port implemented two construction projects and a single project in cooperation with EPA, affecting approximately 21 acres of aquatic in 2003, resulting in net improvements in aquatic habitat conditions. Projects included removal of approximately 1800 creosote piling, placement of clean sediment cap material, and removal of over-water structure coverage. Additional work planned in 2004.	Port of Seattle	
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	In 2003, PPS staff and volunteers restored or provided extensive maintenance to the following projects in the Duwamish:  • General Services Administration  • Hamm Creek  • Turning Basin  • Terminal 105  • Terminal 107  • Puget Creek estuary There were over 10 weeding and planting events at these sites that involved 72 volunteers contributing 290 hours of effort.	People for Puget Sound	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		Maintenance included planting over 200 native plants in a total area of greater than 2 acres.		
		<ul> <li>In addition, the following restoration activities were carried out:</li> <li>T-107: Earth Day marsh restoration project consisting of intertidal plants</li> <li>General Services Administration: reconstructed the whole-site goose excluder</li> </ul>		
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	In 2003, ECOSS completed about 80% of the design/development phase for Duwamish habitat project. In 2004, the final design/development will be released and the search for implementation funding will begin.	Environmental Coalition of South Seattle	No effect
EBD 1	Restore Lower Green, Elliott Bay/Duwamish, and Nearshore habitats.	PSA patrolled the Duwamish by boat 30 times. Patrols looked for violations of best management practices (e.g., sandblasting grit entering the river) and fish kills. Also took water quality samples. Monitored discharge reports of NPDES permittees. Visually monitored the dredging of several Superfund clean up sites.	Puget Soundkeeper Alliance	No effect
EBD Study 1	Conduct baseline habitat mapping in the Elliott Bay/Duwamish subwatershed.	This was identified as Strategic Assessment Task 3 (Current Habitat Conditions). Seattle Public Utilities managed work in 2003. Funded with grant from Salmon Recovery Funding Board. Draft report due in early 2004.	Technical Committee Seattle	Idea source

Action or Study Number			Implementer	Role of NTAA*
		Corps of Engineers' Puget Sound Nearshore study began in 2002 and continued in 2003.		
<b>Nearshore</b> 3	Subwatershed Actions (NS)			
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	City developed non-intensive use park plan for Branson property (since named "Eagle Landing Park"), which will ensure protection of nearshore habitat.	Burien Army Corps of Engineers	No effect
		Seahurst Seawall study was completed in 2002. Army Corps expected to remove the seawall and restore the beach in 2004.		
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	Parks began redoing Luna Park to restore nearshore functions. Plans for repairing Luna Park include removal of a seawall that impedes shore drift of sediments.	Seattle	No effect
		Beach renourishment at Seacrest was under discussion with the regulatory agencies.		
		Seattle Parks committed to soft shore protection at Lincoln Park (in conjunction with Corps of Engineers), Lowman Beach and Cormorant Cove.		
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	Ecology's creation of and planning for implementation of the Total Maximum Daily Load should improve water quality in the near shore and estuary.	Washington State Department of Ecology	No effect

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	In 2003, King County undertook a rapid but comprehensive effort to inventory and prioritize surface water and habitat needs on Vashon/Maury Island. This effort is called the Rapid Rural Reconnaissance (RRR). A draft of the RRR report was released in January 2004. The report lists priority drainage and water quality projects, acquisitions, studies, and programs that will all contribute to improving island-wide priorities for surface water and natural habitat.	King County	
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	Interlocal agreement for implementation of Des Moines Creek Basin Plan negotiated in 2003 and completed in early 2004. Final design completed in 2003. Permitting expected to be completed in 2004. First project scheduled for summer 2004. Plan addresses stormwater control and fish habitat.	Des Moines SeaTac King County Port of Seattle	No effect
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	A beach restoration event was carried out at Pat Collier's Beach on Maury Island during July – October. In November, an additional volunteer weed and maintenance event took place.	People for Puget Sound King County	No effect
NS 1	Restore nearshore, Elliott Bay/Duwamish, and Lower Green River habitats	Volunteers maintained a previously-restored stretch of Des Moines Creek throughout the year. 750 sq ft of dune grass was planted in the estuary.	Friends of Des Moines Creek Des Moines	No effect
NS 2	Support the Puget Sound Nearshore General Investigation	WRIA 9 Forum allocated \$50,000 in 2002 and again in 2003 using KCD funds.	WRIA 9 Forum Seattle	Idea source

Action or Study Number	Action Description	Steps Taken to Implement in 2003	Implementer	Role of NTAA*
		Seattle contributed \$37,500 (in kind) to the PSNERP Bathymetric LiDAR mapping (see below).	King Conservation District (funding)	
NS Study 1	Conduct nearshore habitat baseline mapping.	LiDAR bathymetry study conducted in 2003 to map the intertidal nearshore habitat in WRIA 9. Mapping filled in gap between topographical maps (uplands) and bathymetric maps (subtidal marine). Data will serve as baseline information and will support accurate classification of nearshore habitats.	Seattle Technical Committee Federal Way King County	Idea source
NS Study 1	Conduct nearshore habitat baseline mapping.	This was identified as Strategic Assessment Task 3 (Current Habitat Conditions). Completed marine shoreline inventory report. Managed by Seattle and funded in part by grant from Salmon Recovery Funding Board.	Seattle Technical Committee	Idea source

#### Resource People:

If you would like to know more about the accomplishments described above, please contact the following:

Organization	Contact Person	E-Mail Address	Phone
City of Algona	Randy Bailey	Randyb@cityofalgona.com	(253) 833-2897
City of Auburn	Eric Hagen	ehagen@ci.auburn.wa.us	(253) 288-7432
City of Burien	Dan Bath	Danb@ci.burien.wa.us	(206) 439-3154
City of Covington	Matt Mathes	mmathes@ci.covington.wa.us	(253) 638-1110 ext. 226
City of Des Moines	Loren Reinhold	LREINHOLD@cityofdesmoines.com	(206) 870-6524
City of Enumclaw	Chris Searcy	chrissearcy@ci.enumclaw.wa.us	(360) 615-5721
City of Federal Way	Paul Bucich	Paul.bucich@ci.federal-way.wa.us	(253) 661-4135
City of Kent	Bill Wolinski	bwolinski@ci.kent.wa.us	(253) 856-5548
City of Maple Valley	Dave Zielinski	dave.zielinski@ci.maple-valley.wa.us	(425) 413-8800
City of Normandy Park	Steve Bennett	steveb@ci.normandy-park.wa.us	(206) 248-8257
City of Renton	Ron Straka	rstraka@ci.renton.wa.us	(425) 430-7248
City of SeaTac	Don Monaghan	dmonaghan@ci.seatac.wa.us	(206) 973-4721
City of Seattle	Judith Noble	Judith.Noble@ci.seattle.wa.us	(206) 684-8078
City of Tacoma	Paul Hickey	phickey@ci.tacoma.wa.us	(253) 502-8692
City of Tukwila	Ryan Partee	Rpartee@ci.tukwila.wa.us	(206) 433-0179
King County	Lorin Reinelt	lorin.reinelt@metrokc.gov	(206) 296-1960
U.S. Army Corps of Engineers	Noel Gilbrough	noel.l.gilbrough@usace.army.mil	(206) 764-3652
Washington State Department of Fish and Wildlife	Kirk Lakey	lakeykal@dfw.wa.gov	(425) 649-7088
Washington State Department of Ecology	Steve Hirschey	shir461@ecy.wa.gov	(425) 649-7066
Washington State Department of Natural Resources	Rex Thompson	rex.thompson@wadnr.gov	(360) 825-1631 ext. 2311
Washington State Parks	Regional Office	-	(253) 931-3907
King Conservation District	Geoff Reed	geoff.reed@kingcd.org	(206) 764-3410 ext. 103
Green River Flood Control Zone District	Steve Bleifuhs	Steve.bleifuhs@metrokc.gov	(206) 296-8011
Port of Seattle	George Blomberg	blomberg.g@portseattle.org	(206) 728-3194
Covington Water District	Bob Taylor	btaylor@covingtonwater.com	(253) 631-0565 ext. 166

South King County Regional Water	Don Wright	scrapcentral@worldnet.att.net	(253) 639-0779
Association		-	
Mid-Sound Regional Fisheries	Troy Fields	troy@midsoundfisheries.org	(206) 529-9467
Enhancement Group	-		
People for Puget Sound	Heather Trim	Htrim@pugetsound.org	(206) 382-7007
Puget Soundkeeper Alliance	Sue Joerger	suejoerger@pugetsoundkeeper.org	(206) 297-7002
Trout Unlimited	Al Barrie	sbarrie313@aol.com	(253) 265-3153
Duwamish River Cleanup Coalition	BJ Cummings	bjcummings@pugetsound.org	(206) 954-0218
Environmental Coalition of South	Charlie Cunniff	Charlie@ecoss.org	(206) 767-0432
Seattle (ECOSS)			
Green/Duwamish Watershed Alliance	John Beal	stream101@aol.com	(206) 762-3640
and I'M A PAL			
Cascades Conservation Partnership	Demis Foster	dfoster@ecosystem.org	(206) 675-9747 ext. 203
Cascade Land Conservancy	Michelle Connor	michellec@cascadeland.org	(206) 292-5907 ext. 106
Middle Green River Coalition	Greg Winguard	gwingard@earthlink.net	(206) 322-3061
South King County Group, Sierra Club	Becky Stanley	beckett@nwlink.com	(206) 721-3890
Cascade Chapter			
Washington Trout	Jamie Glasgow	Jamie@washingtontrout.org	(425) 788-1167
SHADOW	Max Prinsen	Max.prinsen@otis.com	(425) 432-9965
Friends of Soos Creek Park	Joe Miles	-	(206) 296-7179
Fauntleroy Watershed Council	Judy Pickens	Jpickens@gte.net	-
Normandy Park Community Club	John Patha	-	(206) 824-8579
Friends of Des Moines Creek	Laura Doherty	Fishpeople@integrity.com	(206) 870-7874
Vashon-Maury Island Land Trust	Tom Dean	tom@vashonlandtrust.org	(206) 463-2644
Vashon-Maury Island Audubon Society	Ed Swan	swanbarn@concentric.net	-

Hatchery-Related Activities of Note (hatchery practices were not addressed by the Near-Term Action Agenda for Salmon Habitat Conservation but these activities were reported by partners and are included due to their possible interest; note that these entries do not include responses from Washington Department of Fish and Wildlife or the Muckleshoot Indian Tribe, which are the major producers of hatchery fish in the watershed):

- Trout Unlimited Des Moines Chapter planted 100,000 coho in Walker and Miller Creeks in 2003 and a small amount in Des Moines Creek. They had buttoned up and were planted within the timeline required without feeding them. The fish were produced at the Chapter's Miller Creek hatchery at the Southwest Suburban Sewer District in Normandy Park. There were no net pen operations at the Des Moines Marina due to lack of hatchery fish.
- In March of 2003, Trout Unlimited, the Green River Steelhead and Trout Club, the Muckleshoot Indian Tribe, and Washington Department of Fish and Wildlife partner in the capture -- via sport fishing methods -- of wild steelhead to be transported to the Keta Creek Hatchery. They were held until ripe and then spawned. The adults were released alive back into the river. The Tribal hatchery incubated the eggs, held the fry until 'buttoned up,' and then released them into the Green River. Some have been released in the Upper Green River sub-watershed and the rest below the Tacoma Headworks dam. In 2003, about 40 were captured.
- Trout Unlimited participated in the acclimation of Green River steelhead at Crisp Creek at Flaming Geyser State Park. After about four weeks there during March/April, 20,000 smolts were directly released into the Green River hopefully to return to the reach of the State Park when they return as adults rather than swim directly back to Palmer area.